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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,179	03/27/2001	Richard Francis Russell	2000-0020.00	1247

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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/818,179	RUSSELL ET AL.	
	Examiner	Art Unit	
	Victor Lesniewski	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 11/18/2004 has been placed of record in the file.
2. Claims 1-23 are now pending.
3. The applicant's arguments, see pgs. 3-15 of the amendment filed 11/18/2004, with respect to the rejection of claims 1-5, 9, 10, 12, 14, and 17 under 35 U.S.C. 102(b) and the rejection of claims 6-8, 11, 13, 15, 16, and 18-23 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. Upon further consideration, a new grounds of rejection is made as will be discussed in detail below.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-10, 12, 17, 18, and 20-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki (U.S. Patent Number 6,785,727).

6. Yamazaki has disclosed:

- <Claim 1>

A method of sharing a printer between a plurality of users on a computer network, said method comprising the steps of: attaching host-based networking hardware to the printer (figure 2, item 1001); providing a network communication protocol defining a command

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channel and a data channel (column 15, lines 36-47); allowing only one of the users to own the data channel at any single point in time (column 8, lines 28-34); and instructing the host-based networking hardware to accept information on the data channel only from the user that owns the data channel (column 10, lines 34-36).

- <Claim 2>

The method of claim 1, wherein the host-based networking hardware disregards all said information received on the data channel from any of the users that do not own the data channel (column 10, lines 34-36).

- <Claim 3>

The method of claim 1, wherein the host-based networking hardware responds to a command on the command channel from any of the users (figure 15, items S1501, S1502, and S1503).

- <Claim 4>

The method of claim 3, wherein the host-based networking hardware responds with a status response (figure 15, item S1503).

- <Claim 5>

The method of claim 4, wherein the status response indicates the user that owns the data channel (figure 16, "Owner").

- <Claim 6>

The method of claim 1, wherein the user that owns the data channel can release the data channel by sending one of a close signal and a terminate signal on the command channel to the host-based networking hardware (figure 15, items S1505 and S1506).

- <Claim 7>

The method of claim 6, wherein a print job is aborted in response to the terminate signal (figure 15, item S1507).

- <Claim 8>

The method of claim 6, wherein a user that does not own the data channel can acquire the data channel by sending a connect signal on the command channel to the host-based networking hardware (column 8, lines 28-34).

- <Claim 9>

The method of claim 1, wherein the network communication protocol defines a communication frame having at least one of a destination address field, a source address field, a frame identifier field, a command/data definition field, and a payload field (figure 12).

- <Claim 10>

The method of claim 9, comprising the further step of sending the communication frame from the user that owns the data channel to the host-based networking hardware (column 14, lines 7-8).

- <Claim 12>

The method of claim 10, wherein the communication frame has a frame number and a sequence number, the host-based networking hardware discarding any said communication frame that does not have an expected said sequence number (column 13, lines 43-46; column 13, line 66 through column 14, line 6; and column 22, lines 57-59).

- <Claim 17>

A method of sharing a network appliance between a plurality of users on a computer network, said method comprising the steps of: providing a network communication protocol defining a command channel and a data channel (column 15, lines 36-47); allowing only one of the users to own the data channel at any single point in time (column 8, lines 28-34); and instructing the network appliance to accept information on the data channel only from the user that owns the data channel (column 10, lines 34-36).

- <Claim 18>

A method of sharing a network appliance between a plurality of users on a computer network, said method comprising the steps of: using one of the users to transmit a data frame into the computer network (column 14, lines 7-8); receiving the data frame with said network appliance (column 14, lines 7-8); determining whether a first portion of the data frame includes a unique, predetermined sequence of data (figure 13, items S1303, S1305, S1306, S1307, S1308); reading and processing a second portion of the data frame if the first portion of the data frame includes the predetermined sequence of data (column 13, line 66 through column 14, line 6 and figure 13, items S1304, S1315, S1316, S1317, S1318); and discarding the data frame without reading and processing the second portion of the data frame if the first portion of the data frame does not include the predetermined sequence of data (column 22, lines 57-59).

- <Claim 20>

The method of claim 18, wherein the first portion of the data frame comprises an initial portion of the data frame (column 13, line 66 through column 14, line 6).

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- <Claim 21>

The method of claim 18, wherein said determining step is performed in real time without storing the data frame in a memory (column 18, lines 27-59).

- <Claim 22>

The method of claim 18, wherein the network appliance comprises a printer (figure 2, item 1000).

- <Claim 23>

The method of claim 18, wherein said determining step is performed exclusively with hardware (figure 11).

Since all the limitations of the invention as set forth in claims 1-10, 12, 17, 18, and 20-23 were disclosed by Yamazaki, claims 1-10, 12, 17, 18, and 20-23 are rejected.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki.

9. Concerning claims 11 and 13, Yamazaki did not explicitly disclose that his printer system would send acknowledgements to the user of the data channel. However the use of acknowledgements between two such devices in a computer network is commonly practiced in

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the art. For example, see Williams et al. cited below. Yamazaki's system, which transfers data between the two devices using a bi-directional medium, could easily send acknowledgements from the printer to the user device. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Yamazaki by adding the ability to send acknowledgements to the user of the data channel because it would help assure proper data transfer as is well known in the art.

10. Concerning claims 14-16, Yamazaki did not explicitly disclose the use of a timeout when communication frames are not received within a predetermined time period. However the use of timeouts in network connections between two such devices is commonly practiced in the art. For example, see Williams et al. cited below. Yamazaki's system, which tracks data transfer between the two devices, could easily use a timeout if frames are not received at the printer. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Yamazaki by adding the ability to use a timeout when communication frames are not received within a predetermined time period because it would help assure proper data transfer as is well known in the art.

11. Thereby, Yamazaki discloses:

- <Claim 11>

The method of claim 10, wherein the host-based networking hardware sends an acknowledgement of receiving the communication frame to the user that owns the data channel (obviousness as discussed above).

- <Claim 13>

The method of claim 12, wherein, in response to receiving said communication frame that does not have said expected sequence number, the host-based networking hardware sends an acknowledgement including the frame number of a last successfully received communication frame to the user that owns the data channel (obviousness as discussed above).

In addition it has been shown that Yamazaki's system rejects frames and responds to the user in various ways. See column 19, lines 43-50 as one example. Yamazaki's system can return various job data to the user at various times and it could easily return a frame number with that data since the system tracks such packet numbers and identification information.

- <Claim 14>

The method of claim 10, wherein a timeout occurs when the host-based networking hardware does not receive said communication frame within a predetermined time period (obviousness as discussed above).

- <Claim 15>

The method of claim 14, wherein the host-based networking hardware aborts a print job after a third said timeout (obviousness as discussed above).

In addition, taking some action in the system after a set number of timeouts was similarly well known in the art at the time of the applicant's invention.

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- <Claim 16>

The method of claim 15, wherein the host-based networking hardware releases the data channel after the print job is aborted (obviousness as discussed above).

In addition Yamazaki's system can be set to release the data channel to other users if no data is being passed from the user with the reservation. See column 11, line 53 through column 12, line 11. This same action could sensibly be taken after an abortion due to timeouts.

Since Yamazaki discloses all of the above limitations, claims 11 and 13-16 are rejected.

12. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki in view of Official Notice.

13. The combination discloses:

- <Claim 19>

The method of claim 18, wherein the data frame has an Ethernet format (Official Notice).

The use of Ethernet in network communications systems was well known in the art at the time of the applicant's invention. Therefore, Official Notice is taken.

Since the combination of Yamazaki and Official Notice discloses all of the above limitations, claim 19 is rejected.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

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- Williams et al. (U.S. Patent Number 6,202,096) disclosed a method of passing information between a printer and a computer using a positive acknowledgement of segment and a retransmission timeout.
- Mochizuki (U.S. Patent Number 6,384,926) disclosed a system that gains transmission access from a printer side to an upper equipment side where the printer is connected to a network via a bi-directional communicable interface unit.
- Yanagidaira (U.S. Patent Number 6,490,052) disclosed a printer controller that controls the shared printer of a network to which clients are connected where the printer controller performs operations such as monitoring, checking, and instruction of the shared printer.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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